



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,666	02/04/2005	Jose De Jesus Pineda De Gyvez	NL 020835	8446
24737	7590	11/20/2006	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			TRA, ANH QUAN	
P.O. BOX 3001			ART UNIT	PAPER NUMBER
BRIARCLIFF MANOR, NY 10510			2816	

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/523,666	PINEDA DE GYVEZ ET AL.
	Examiner	Art Unit
	Quan Tra	2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 October 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-11 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 11 and 13-17 is/are allowed.
- 6) Claim(s) 1 and 4-10 is/are rejected.
- 7) Claim(s) 2 and 3 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the amendment filed 10/12/06. A new ground of rejection is introduced as necessitated by amendment.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marr et al. (USP 6529421) in view of Lee et al. (USP 5223753) and Cave et al. (USP 5087830).

As to claims 1 and 10, Marr et al.'s figure 20A shows a threshold control circuit, but does not show the detail of the bandgap voltage generator 2018 and the detail of comparator 2010. However, Lee et al.'s figure 2 shows a comparator circuit and Cave et al.'s figure 1 shows a bandgap voltage generator both having low power consumption. Therefore, it would have been obvious to one having ordinary skill in the art to use Lee et al.'s comparator and Cave et al.'s bandgap circuit for Marr et al.'s comparator and bandgap circuit for the purpose of saving power consumption. Thus the modified Marr et al.'s figure 20A shows: a control unit controlling a threshold voltage of a circuit unit (2002) having a plurality of transistor devices, comprising a reference circuit (Cave et al. figure 1 in the modified 2018); a measuring unit (Lee et al.'s 1-3, 5 and 6 in the modified 2010) measuring a threshold voltage of at least one sensing transistor of the circuit unit and measuring a reference threshold voltage of at least one reference transistor of the reference circuit; a differential voltage generator (Lee et al.'s 4 and 7-13 in the modified 2010) generating a differential voltage from outputs of the measuring unit, the voltage generator comprising an averaging unit (30), a comparing unit (8, 9) and an amplifier (10, 11); and a bulk

Art Unit: 2816

connection of the transistor devices in the circuit unit to which the differential voltage is fed as a biasing voltage.

As to claim 4, the modified Marr et al. shows the reference circuit comprises at least one reference transistor (Cave's 46) in at least one comparator amplifier (Cave's 16).

As to claim 5, it would have been obvious to one having ordinary skill in the art to the reference transistor to be provided in a separate well of the chip comprising the circuit unit in order to separate temperature characteristic between two circuits.

As to claim 6, the modified Marr et al.'s figure 20A shows that the reference transistor is controlled separately from the transistor devices of the circuit unit by a reference voltage.

As to claim 7, the modified Marr et al. shows that the measuring unit comprises at least one sensing transistor (Lee et al.'s 1) sensing the threshold voltage.

As to claim 8, the modified Marr et al.'s figure 20A shows that the sensing transistor is controlled separately from the reference transistor by a sensing voltage.

As to claim 9, the modified Marr et al.'s figure 20A shows the circuit unit comprises a plurality of transistor devices (transistors in 2002 and transistors in Cave's figure 1, and a first sub-plurality of the transistor devices is employed as reference transistors and a second sub-plurality of the transistor devices is employed as sensing transistors, and wherein the differential output of the differential voltage generator is fed as a biasing voltage to the bulk of the plurality of transistor devices.

Allowable Subject Matter

3. Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 11 and 13-17 are allowed.

Art Unit: 2816

Claims 2 and 3 would be and claims 11 and 13-17 are allowable because the prior art fails to teach or suggest that the differential voltage generator comprises: an averaging unit forming at least one average threshold voltage value of at least one measured transistor threshold voltage of the circuit unit; a comparing unit comparing at least one average threshold voltage value of the circuit unit with at least one measured transistor threshold voltage of the reference circuit and creating at least one difference voltage value indicating the difference between at least one average threshold voltage value of the circuit unit and at least one transistor threshold voltage of the reference circuit; an amplifier unit amplifying at least one difference voltage value of the comparing unit and creating at least one amplified difference voltage value.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2816

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quan Tra whose telephone number is 571-272-1755. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



QUAN TRA
PRIMARY EXAMINER
ART UNIT 2816

November 13, 2006